

Claims

1. A resorbable polymer composition comprising:
a base material including a polymer matrix of resorbable polymer or copolymer, and
5 N-methyl-2-pyrrolidone (NMP),
wherein NMP is present in an amount imparting osteogenic properties for the composition.
2. The resorbable polymer composition of claim 1, wherein the
10 polymer matrix is selected from a group consisting of polyglycolide, polylactides, polycaprolactones, polytrimethylenecarbonates, polyhydroxybutyrates, polyhydroxyvalerates, polydioxanones, polyorthoesters, polycarbonates, polytyrosinecarbonates, polyorthocarbonates, polyalkylene oxalates, polyalkylene succinates, poly(malic acid), poly(maleic anhydride),
15 polypeptides, polydepsipeptides, polyvinylalcohol, polyesteramides, polyamides, polyanhydrides, polyurethanes, polyphosphazenes, polycyanoacrylates, polyfumarates, poly(amino acids), modified polysaccharides, modified proteins and their copolymers, terpolymers or combinations or mixtures or polymer blends thereof.
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3. The resorbable polymer composition of claim 1, wherein the polymer matrix is selected from the group consisting of polyglycolide, poly(L-lactide-co-glycolide), poly(D,L-lactide-co-glycolide), poly(L-lactide), poly(D,L-lactide), poly(L-lactide-co-D,L-lactide), polycaprolactone, poly(L-lactide-co-caprolactone), poly(D,L-lactide-co-caprolactone) polytrimethylenecarbonate, poly(L-lactide-co-trimethylenecarbonate), poly(D,L-lactide-co-trimethylenecarbonate), polydioxanone and their copolymers, terpolymers or combinations or mixtures or polymer blends thereof.
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4. The resorbable polymer composition of claim 1, wherein NMP is present in an amount between 0.05 and 50 weight-%.
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5. A resorbable implant having osteogenic properties, comprising:
a base material including polymer matrix of resorbable polymer or copolymer, and
35 N-methyl-2-pyrrolidone (NMP).

6. The resorbable implant of claim 5, wherein the polymer matrix is selected from a group consisting of polyglycolide, polylactides, polycaprolactones, polytrimethylenecarbonates, polyhydroxybutyrates, 5 polyhydroxyvalerates, polydioxanones, polyorthoesters, polycarbonates, polytyrosinecarbonates, polyorthocarbonates, polyalkylene oxalates, polyalkylene succinates, poly(malic acid), poly(maleic anhydride), polypeptides, polydepsipeptides, polyvinylalcohol, polyesteramides, polyamides, polyanhydrides, polyurethanes, polyphosphazenes, 10 polycyanoacrylates, polyfumarates, poly(amino acids), modified polysaccharides, modified proteins and their copolymers, terpolymers or combinations or mixtures or polymer blends thereof.

7. The resorbable implant of claim 5, wherein the polymer matrix is 15 selected from a group consisting of polyglycolide, poly(L-lactide-co-glycolide), poly(D,L-lactide-co-glycolide), poly(L-lactide), poly(D,L-lactide), poly(L-lactide-co-D,L-lactide), polycaprolactone, poly(L-lactide-co-caprolactone), poly(D,L-lactide-co-caprolactone) polytrimethylenecarbonate, poly(L-lactide-co-trimethylenecarbonate), poly(D,L-lactide-co-trimethylenecarbonate), 20 polydioxanone and their copolymers, terpolymers or combinations or mixtures or polymer blends thereof.

8. The resorbable implant having osteogenic properties of claim 5, wherein NMP is present in an amount between 0.05 and 50 weight-%.

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9. A method of making an implant having osteogenic properties comprising the steps of:

selecting polymer(s) or copolymer(s) of a polymer matrix of the implant,

30 adding NMP to the polymer matrix in an amount imparting osteogenic properties for the implant,

forming the implant from the mixture of said polymer matrix and NMP.

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10. A method of making an implant having osteogenic properties comprising the steps of:

selecting polymer(s) or copolymer(s) of a polymer matrix of the implant,

mixing said polymer(s) or copolymer(s) to form the polymer matrix, forming the implant from said polymer matrix,

5 adding NMP to the implant in an amount imparting osteogenic properties for said implant.

11. The method of making an implant having osteogenic properties of claim 10, wherein NMP is added to the implant preoperatively.